

RESPONSE UNDER 37 C.F.R. § 1.111
U.S. Application No.: 09/987,082

be placed in the present application. For the Examiner's convenience, a copy of the correct initialed Form PTO/SB/08 A&B (modified), which was attached to an Office Action in the '081 application, is attached hereto.

Claim Rejections Under 35 U.S.C. § 103

Claims 1, 3-12 and 14-20 have been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Sato et al (JP 60-089391) for the reasons given in the Office Action.

Claims 1-29 have been rejected under 35 U.S.C. § 103(a) as assertedly being unpatentable over Sato et al in view of Applicants' statement of the prior art for the reasons given in the Office Action.¹

Applicants respond as follows.

The use of microcapsules in the present invention provides unexpectedly superior results. Applicants have conducted additional experimentation comparing the closest specific example disclosed in Sato with representative invention embodiments to demonstrate the unexpected superiority of the present invention. Such experimentation is presented in an executed Rule 132 Declaration submitted herewith.

Sato et al discloses a heat-sensitive recording material wherein the diazo compound is not encapsulated in microcapsules but is simply dispersed in the material. Applicants point out that

¹ Applicants believe that this statement is apparently in error as only Claims 1-20 are pending. Applicants kindly ask the Examiner for clarification.

Sato does not disclose that at least one diazo compound is encapsulated in microcapsules and that the coupler takes the form of general formula (3).

However, the instant invention is directed to a heat-sensitive recording material wherein the diazo compound is encapsulated in microcapsules. The instant invention provides a heat-sensitive material which is excellent in photo-fixing property and which has low color formation in background area.

Heat-sensitive recording materials exemplified in Examples 1 and 2 of the instant invention were compared with a heat-sensitive material prepared according to Example 1 of Sato. As is shown in the table of the Rule 132 Declaration, the examples of the instant invention wherein the diazo compounds were encapsulated in microcapsules exhibit, compared with the comparative example of Sato, a lower color formation in background area (lower fogging in the background area) and a lower density of the color which was formed after photo-fixing, i.e., more excellent photo-fixing property. It is noted that the comparative example wherein the diazonium salt is dispersed exhibits poor photo-fixing property. A higher density of the color which was formed after photo-fixing is observed. Thus, the present invention provides unexpectedly superior results.

Accordingly, reconsideration and withdrawal of the obviousness rejections is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the